

REMARKS

Claims 1-24 are pending in the subject application.

Current Amendments to the Claims

Claims 1, 18 and 21 are currently amended in response to the issues raised in the communication from the Examiner dated April 23, 2003.

Claim 1 has been amended so that the "consisting essentially of" limitation clearly applies to the bridge structure, encompassing all metal layers thereof to exclude tungsten that would raise the melting temperature of the metal layers on the semiconductor material to a temperature above the vaporization temperature of the semiconductor material. This exclusion clearly distinguishes the invention from the reference previously cited as an anticipation (i.e., PCT publication WO 97/42462 of Martinez-Tovar), for reasons set forth in the Applicants' paper dated March 7, 2003.

Claim 18 has been amended in a manner similar to that of claim 1, to clearly establish that the "consisting essentially of" language applies to the exclusion of tungsten in the metal layer over the bridge section of the electrical bridge structure.

Indicated Rejection of Claim 12

The Examiner indicated in the April 23, 2003 communication that claim 12 was "no good" possibly because of the apparent combination of apparatus and method limitations. This ground is respectfully traversed because claim 12 is in a proper "product-by-process" format. As recognized in the MPEP, there are many situations where claims may be drafted to include reference to more than one statutory class of invention. One such situation is a product-by-process claim, wherein a claimed article can be described in terms of the process used to produce it. See MPEP 2173.05(p).

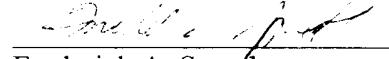
Rejection of Claim 21

In the April 23, 2003 communication, the Examiner indicated that claim 18 would be allowable but for the use of both terms "comprising" and "consisting essentially of" to describe the same structure. The claim has been amended to avoid the simultaneous use of these transition phrases.

The Examiner also indicated that claim 21 was "no good", stating "This is how all igniters with this structure works." The Examiner is respectfully requested to provide a specific example in the prior art of a semiconductor bridge igniter that functions in the manner defined in claim 21, which is believed to be unique because energy that vaporizes the semiconductor bridge material also melts the metal layer thereon, by virtue of the substantial exclusion of tungsten taught by the Applicants. In contrast, the presence of a layer of tungsten in the device described in the Martinez-Tovar publication, prevents that device from functioning as defined in claim 21 because the semiconductor material vaporizes at a temperature lower than the melting temperature of tungsten (see the subject application at page 3, lines 24-31).

As discussed above, claims 1 and 18 have been amended to address the issues raised in the April 23, 2003 communication from the Examiner. The form of claim 12 remains unchanged because, contrary to the Examiner's initial assessment, it is in proper form. Claim 21 is allowable for reasons set forth herein and in previous office actions.

Respectfully submitted,


Frederick A. Spaeth
Registration No. 33,793
Attorney for Applicant

Libert & Associates
3 Mill Pond Lane
P.O. Box 538
Simsbury, CT 06070-0538

Telephone: (860) 651-9321
Facsimile: (860) 651-5735